

APPENDIX

FOMC NOTES - PRF
AUGUST 20, 1996

Mr. Chairman:

I will be referring to the two pages of color charts distributed this morning.

Expected short-term rates in the U.S., Germany and Japan have all declined since your last meeting, as you can see in the three panels of forward rate agreements. U.S. and German forward rates peaked at the time of the release of the June employment data, indicated by the 2nd vertical line, shortly after the Committee's last meeting, and are now trading well below their June and July highs. Japanese expected short-term rates peaked about a week later, around the time of the sharp sell-off in equities and the Chairman's Humphrey-Hawkins testimony, indicated by the 3rd and 4th numbered lines, but have not quite moved below their levels of early June. These seemingly modest changes in expected short-term rates are in contrast to the sharper movements in asset prices, depicted on the second page of charts.

In terms of total returns, U.S. and German bond markets have had quite a rally from their June and July levels, while the Japanese bond market has just barely managed to move into positive territory. Similarly, U.S. and German equity markets have recovered most of their July losses, while the Japanese TOPIX index is still off considerably from its June levels.

The dollar dropped sharply in mid-July against both the mark and the yen, and currency option volatilities jumped up, at the time of the steepest decline in equities, as indicated in the bottom two panels and the 3rd numbered line. However, the

dollar's sell-off was short-lived, seeming to reflect an abrupt closing out of a limited number of long-dollar positions amidst the heightened uncertainty associated with the sharp equity declines. Since then, the dollar has traded sideways and currency option volatilities have traded back down to their previous, low levels.

Looking back over these forward rate and price movements, I am struck by three things.

First, the poor performance of both Japanese bond and equity markets, relative to Germany and the U.S., is quite apparent but, given the roughly similar movements in short-term forward rates, is not necessarily easy to explain. With nominal interest rates so low and the Bank of Japan widely expected to raise rates at some point in the coming months, there is little room for Japanese government bonds to rally. Thus, for JGBs to eke out any gain during the period may be more noteworthy than their relative performance against Treasuries and bunds. In discussing Japanese equities, market participants note that new issuance, particularly by Japanese banks raising equity capital, may be weighing on the market. A somewhat weaker dollar against the yen is also thought to weigh on Japanese equity values.

But instead of focusing on the Japanese markets' weaker performance, it may be that U.S. and German asset prices are a little topish. Indeed, the coincident rally in these markets in late July is another striking feature of the period.

U.S. equity and bond markets both took comfort from the Chairman's Humphrey-Hawkins testimony -- each one focusing on a slightly different time horizon and hearing slightly different messages. The equity market was relieved to hear that an immediate increase in rates was not a foregone conclusion. The

bond market was cheered to hear the Chairman say both that the Committee was especially vigilant and that there was still the possibility of a slowing of the economy in the second half of the year. Thus, when the data releases in early August provided little evidence of rising wage and price pressures and some evidence of slower activity, bond market participants short their duration targets rushed to catch up with those -- fewer, braver souls -- who had been long bonds since late June.

It's hard for me to see Treasuries rallying further from these levels without the market having greater confidence that the economy is likely to be operating at or below potential in the months ahead. For example, last week's jumpy reaction to the CPI report indicated to me that there are some market participants holding long positions who may not yet be entirely comfortable with them. Moreover, with the 30-year bond yield around 6.8 percent, the market is trading at levels previously seen in March and April when the idea that the Committee's next move would be a tightening had not yet been completely accepted.

Two factors seem to cut the other way: U.S. fiscal performance this year is turning out to be better than market participants expected and the inflation performance, so far this year, is also better than many would have predicted given the strength of the economy to date.

The level of implied volatility on options on the September Treasury futures contract is notably lower in the last few days [7.64 vs. around 10]. Thus, whatever unease I may have about the bond market's current pricing, options market participants seem to be less anxious now than they have been.

German asset prices benefitted from flows out of higher-yielding European markets as prospects for an easy route to

European monetary union have begun to fade. As the mark began to firm and bund yields moved lower, the market got the sense that a modest reduction in the Bundesbank's repo rate was -- once again -- a possibility. This, in turn, further supported German asset prices.

The third feature of the period that I find noteworthy is the dog that did not bark: the relative tranquility of the dollar in the last few weeks, after its abrupt drop in mid-July. With short-term interest expectations in Germany, Japan and the U.S. all moving in the same direction, but with U.S. forward rates having had a bit more of step-down, a slightly lower but still stable dollar is not much of a surprise.

However, the dollar's decline did not appear to have been triggered by shifts in interest rate expectations but, rather, by the sharp declines in U.S. equity values. With habit an often underestimated variable in market behavior, I think this leaves the dollar vulnerable, in the short run, to any further correction in equity values. Given the off-again, on-again expectations for a reduction in the Bundesbank's repo rate, the dollar may also be vulnerable if the Bundesbank once again disappoints the recently built-up expectations for lower rates.

In domestic money markets, the Desk added reserves through both temporary and permanent open market operations.

At the end of July and into the first week of August, the Fed Funds market exhibited a firmness which appeared to be associated initially with a forecast miss on our part but then with heightened demand for financing at the general collateral rate in the repurchase market coincident with the month-end, a maintenance-period settlement day, and the settlement of the Treasury's auctions. While the cause-effect relationship between

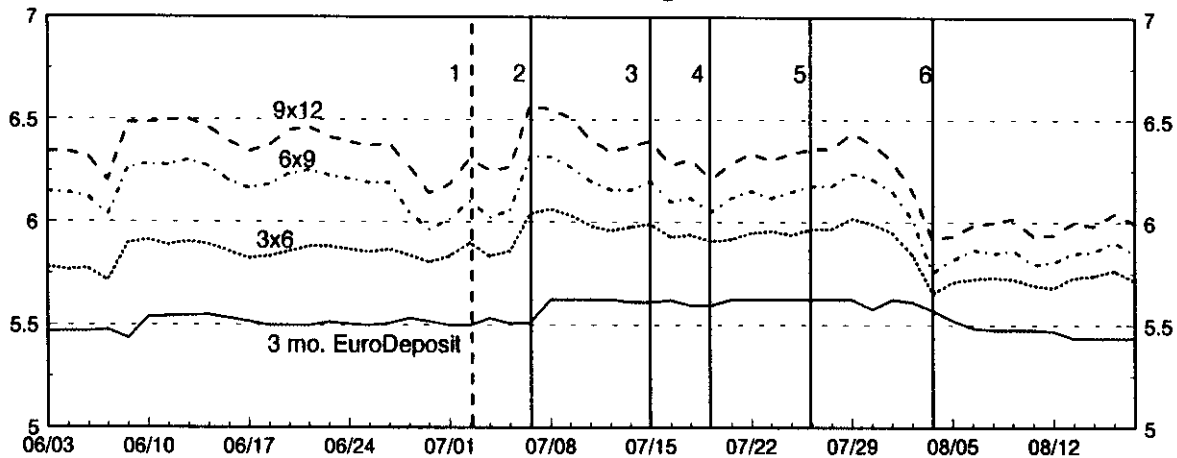
the RP and Fed Funds market in this episode has been hard to pin down, there was no denying the fact of a persistently firm funds rate. The Desk responded by providing substantially more in excess reserves at the start of the August 14th period than normal and, within a couple of days, the funds rate was trading backdown around its target.

The Desk purchased \$4.1 billion in coupon securities in outright operations to meet large current and prospective reserve needs. Reserve needs are expected to continue to grow in September and we may want to make a further permanent injection of reserves before the Committee's next meeting.

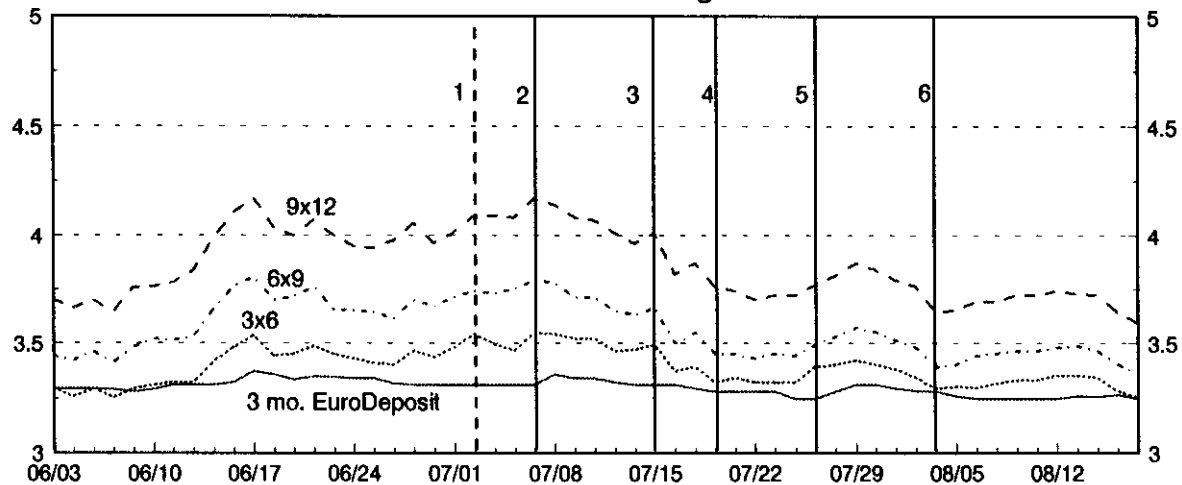
Let me note that members of the Committee should have received, in just the last day or two, a binder of materials to serve as background for a Committee discussion of the maturity structure and management of the SOMA portfolio which is tentatively planned for the Committee's next meeting.

Mr. Chairman, I will need the Committee's ratification of the Desk's domestic operations during the period. We had no foreign exchange operations. I would be happy to answer any questions.

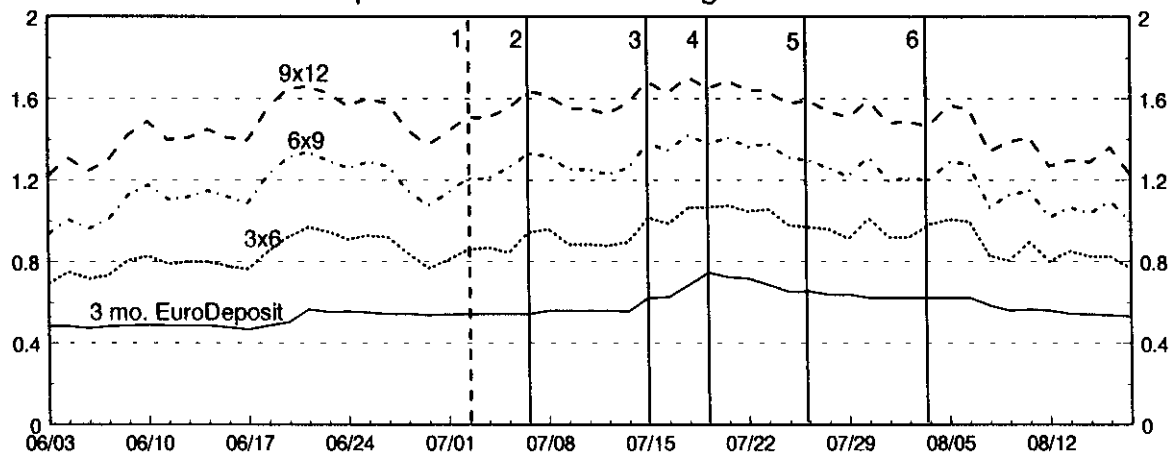
US Forward Rate Agreements*



German Forward Rate Agreements*



Japanese Forward Rate Agreements*

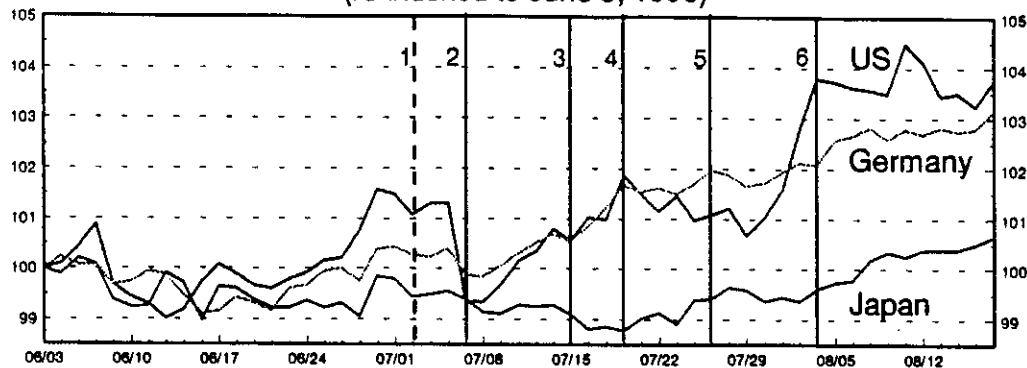


*A forward rate agreement (FRA) is a contract in the eurocurrency markets in which one party promises another to pay a specific interest rate on a deposit of specified amount, currency, and term beginning at a specified date in the future. For example, a 9x12 FRA refers to the yield on a three-month deposit with a value date nine months hence and a maturity date twelve months hence.

1. July 2-3 FOMC meeting
2. June Employment Report
3. Drop of 2.53% in S&P

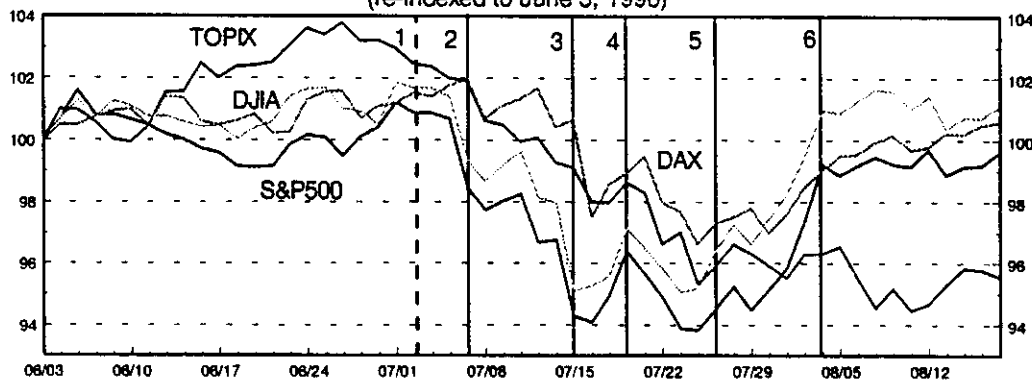
4. Humphrey-Hawkins Testimony (1st day)
5. Bundesbank Leaves Rates Unchanged at Council Meeting
6. July Employment Report

10 Year Government Bonds Total Returns in Local Currencies* (re-indexed to June 3, 1996)

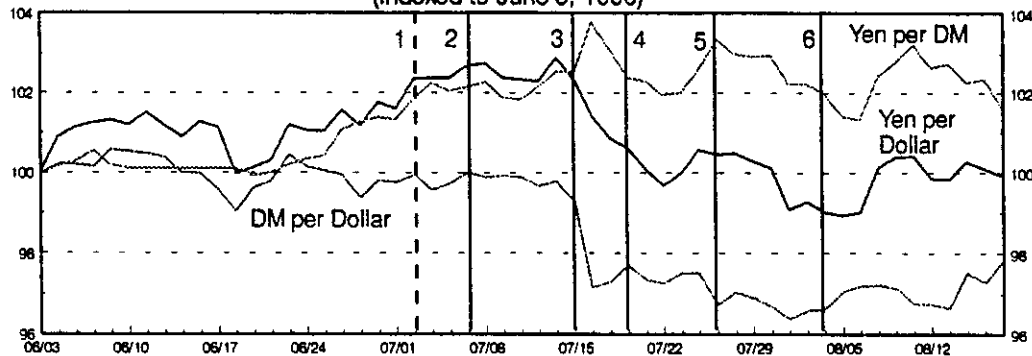


*Represents index of total returns for holding period since June 3, 1996 for benchmark US, Japanese and German government bonds with approximately 10 years duration.
Source: JP Morgan

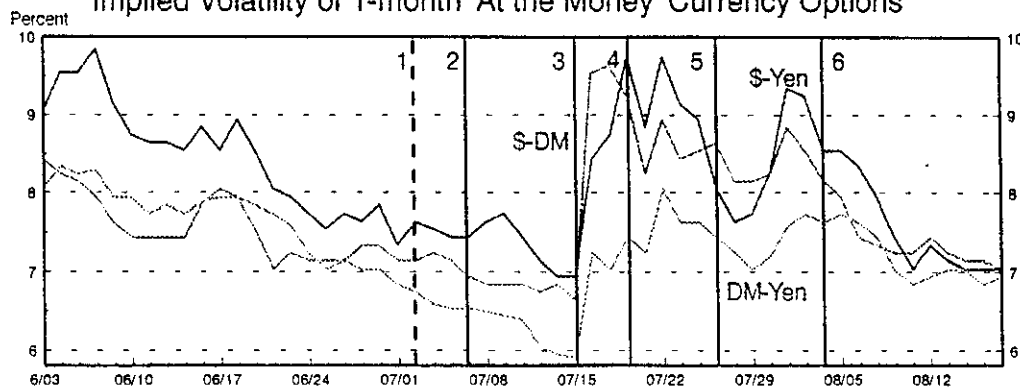
Equity Indices (re-indexed to June 3, 1996)



Exchange Rates (indexed to June 3, 1996)



Implied Volatility of 1-month 'At the Money' Currency Options



1. July 2-3 FOMC meeting
2. June Employment Report
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FOMC Presentation
Charles Siegman
August 20, 1996

The Commerce Department this morning released data for U.S. trade in goods and services for June. The deficit in June narrowed to \$8.1 billion, and the deficit in May was revised down by \$0.3 billion to \$10.5 billion. Imports of goods and services declined more than 3 percent from a relatively strong May level; exports edged down.

For the second quarter, the deficit in goods and services widened to a \$113 billion annual rate from a \$97.5 billion rate in the first quarter.

In the Greenbook, the staff estimated a somewhat larger deficit for June and the second quarter. A preliminary assessment of the new trade data would suggest that the contribution from net exports to GDP growth in the second quarter was about 0.4 percentage points less negative than was projected in the Greenbook, with nearly all of the revision associated with lower imports. As a result, second-quarter real GDP would now show about a 4 percent annual growth rate compared with the 3.7 percent rate shown in the Greenbook, approaching the BEA's advance number for second-quarter real GDP growth.

On foreign exchange markets, the dollar edged up following the release of the June trade data.

Michael J. Prell
August 20, 1996

FOMC BRIEFING

I'll be brief this morning. Charles has wrapped up what we know about the second-quarter GDP accounting, and I really don't have much to add to what you've already read in the Greenbook regarding our assessment of the outlook.

Apart from the trade data, the only major statistical indicator that has come out since we finalized our forecast was July housing starts and building permits. In the key single-family sector, starts fell substantially last month, to a level that is a tad below our predicted third-quarter pace; permits slipped for the third consecutive month. Overall, the report supplied the evidence we were looking for that residential construction is indeed weakening. I might note that the partial results of the August Michigan survey of consumer sentiment, which also were released on Friday, showed that people still hold predominantly favorable views of homebuying conditions, with prevailing interest rates actually seen as a positive factor. We'd think, though, that the large number of home purchases through the spring exhausted some of the more urgent demand and that sales will run lower over the remainder of the year even if market conditions still seem attractive.

As you know, the Michigan survey also indicated that consumer sentiment in general remains quite upbeat. Not only are things perceived to be going well now, but people seem to expect more of the same going forward. Businessmen, too, appear to hold favorable, though not ebullient, views of the outlook at this time. And Wall Street seems to think things are going just swimmingly.

Based on that picture, it might be tempting to adjourn the meeting now and enjoy the rest of the summer along with everyone else. However, ever the wet blanket at the office party, I'll mention a couple of potential problems.

First, there's more evidence now that the inflationary cycle has started to turn upward. The key evidence is, of course, the ECI report for June. There's enough noise in this series that one must be careful not to read too much into the numbers. But the acceleration of wages in the first half, which lifted the rate of increase in total compensation, is a signal that's difficult to ignore--especially when it meshes so nicely with the widespread anecdotal reports of tight labor markets and increased wage pressures. And the first installment of the big increase in the minimum wage is looming just ahead.

Of course, it's arguable that prices need not follow a rise in compensation step for step. And our forecast does anticipate some compression of profit margins. However, absent a commensurate acceleration of productivity, the labor cost pressures are likely to show through eventually. And there simply isn't any statistical evidence to suggest that productivity is taking off. If anything, the recent trends have been disappointing--and our forecast could be said to be optimistic in looking for some improvement in productivity performance in coming quarters, especially when qualified labor is reportedly in such short supply.

Be that as it may, the pickup in inflation we've projected is rather mild, producing CPI increases just a little above 3 percent this year and next. Which brings me to the other possible problem: namely, that the prediction of so limited a deterioration in wage and price trends is contingent on a prompt moderation of aggregate demand that is not yet fully in evidence. To be sure, there are hints. The

decline in housing starts clearly is a step in that direction. And while there's talk of a pickup in retail activity in August, the sluggishness of sales on balance in June and July suggests that consumer spending still will be up less this quarter than last.

The one seemingly contrary indicator is the recent run of low readings on initial claims for unemployment insurance. Although there's reason to believe that changes in seasonal layoff patterns accounted for the sharp drop in adjusted claims in the latter half of July, that rationale is becoming less compelling as we move through August. Under the circumstances, one can't rule out the possibility that what we've seen is in fact a sign of more hiring than is built into our forecast.

That said, I don't want to leave the impression that we think there's a major asymmetry to the risks attending our current-quarter GDP forecast. Initial claims can be erratic, and even on a quarterly basis the relationship of given levels to gains in employment or output is not a tight one. At least at this point, in light of the other evidence on the pace of activity, we feel it reasonable to discount the signal of strength coming from the claims figures.

One final thought. We said very little in the Greenbook about the possibility of an auto strike. There were two reasons: First, we don't know what's going to happen. Of course, that rarely stops us from forecasting. So second, and more important, is the thought that, if there is a strike, the main effect is likely to be mainly some short-run gyrations in the data, rather than a meaningful alteration in the fundamental trends that are most relevant to your monetary policy decision.

Mr. Chairman. I'll stop here and invite any questions you and your colleagues might have for us.

August 20, 1996

FOMC Briefing
Donald L. Kohn

As at your last meeting, the issue for the Committee would seem to be whether to raise the funds rate. Last time, several of you framed your comments around two key questions bearing on this decision: One, would the economy slow promptly enough to the growth of its potential so that resource utilization would stabilize at around recent levels? Two, would something close to the current level of resource utilization be consistent with holding the line on inflation?

As the Greenbook noted, the evidence becoming available since the last meeting on these issues is mixed. Most of the real side data point to a slowing in the expansion, though whether it will be sufficient to forestall further increases in resource utilization remains an open question. However, as Mike discussed, the compensation data have seemed to confirm that an acceleration has begun--mostly in association with unemployment rates a shade above those prevailing now or in the staff forecast--and the political process has thrown an adverse supply shock into the macroeconomic mix by raising the minimum wage. The higher minimum wage is, to be

sure, a change in the level of compensation in the first instance, but it would tend to raise the inflation rate as employers passed it through to output prices and workers in turn attempted to maintain the level of their real wages.

Nonetheless, in the financial markets, concern about inflation pressures has receded. Markets do not have a tightening built in for this meeting, and the structure of futures rates and the yield curve through the longer maturities, after rough allowance for usual term premiums, suggest that market participants suspect that at most only a small policy firming will be needed to contain inflation. However, these sorts of readings have become even more questionable over time as an independent assessment of inflation potential. Market participants seem increasingly to be shaping their evaluations of the economic situation partly by their perception of your outlook, as well as their reading of incoming data and your likely response. A portion of the bond market rally since mid-July reflected their belief after the Humphrey-Hawkins hearings that you did not see the inflation threat as quite as pressing as they once thought you did.

Still, other financial market indicators also are consistent with a policy that is not too far from neutrality. The levels of longer-term real rates--as best one can judge them--remain close to those that on average in the past 15 years have been adequate to keep inflation in check. Even so, real interest rates and the dollar are a bit lower than they were at the time of your last meeting, suggesting slightly less restraint on aggregate demand than you might have anticipated in early July. Meanwhile, credit continues to be available to businesses on terms that, if anything, are becoming a bit more favorable over time. For households, lenders are reconsidering the aggressive lending postures they had adopted during recent years, but we don't see evidence of a tightening of consumer credit availability that will significantly crimp household spending. The slowing of money and debt growth in recent months perhaps offers some reassurance that policy is not so accommodative as to foster clearly inflationary bulges in liquidity or credit. Viewed over a slightly longer time span, growth in broad measures of money and credit has remained consistent with expansion of nominal GDP in the 4-1/2 to 5 percent range of the staff forecast.

The staff's assessment of the outlook is not far from that of the market, though perhaps tilted a little more toward the risk of greater inflation. In the staff forecast, interest rates are somewhat too low to hold the economy at potential, and the resulting output gap, combined with the impulse from the minimum wage, implies that you will have to tighten at some point. The rise in inflation by itself would require an increase in nominal rates just to keep real rates from falling and making policy more accommodative over time. And, of course, real rates themselves would have to be raised to stop the upward movement in inflation, if the staff's assessment of macro relationships is about right. A small increase in real rates might be sufficient if the Committee were content to close the output gap and accept whatever rate of inflation prevailed when the economy settled back down to potential; but the adjustment would take some time, implying an inflation rate that probably leveled out noticeably higher than recent experience. An even higher real rate for a time and some economic slack would be required to offset the impulse from the minimum wage if you wanted inflation, after rising in the near term, to come back down and to level out closer to recent outcomes. And, a persistently higher real rate

would be needed to put inflation on a track toward price stability without relying on unforeseen supply or demand shocks. In terms of order of magnitude, the Taylor rule calculations in the Financial Indicator package suggest a rise in the funds rate to the neighborhood of 6 percent by late next year if output and prices follow the Greenbook track to be consistent with your historical reaction to incoming information. The tighter alternative in the Greenbook takes the funds rate to 6-1/4 percent in 1997 to tilt inflation down slightly; though inflation next year would still be above the last few years, further declines would be in the offing.

In these circumstances, what are the costs and benefits from keeping policy unchanged at this time? The clear benefit is a higher level of output for a period if you do not raise short-term interest rates and it turns out you do not need to do so to achieve your inflation objectives. Many of you have already given a number of reasons why inflation may turn out better than the staff expects, and with even early signs of price and cost pressures still muted outside of the labor market, the FOMC may want to await more distinct indications about the future course of inflation before firming policy.

But there are costs to waiting if inflationary pressures are in fact intensifying, or if the Committee desires some assurance that inflation will tilt down over the intermediate run. First, inflation would be higher than the Committee desired and if sustained, likely would have its own output cost over time. In your discussion at the last meeting, members generally agreed that the economy probably would operate more efficiently at lower rates of inflation than had prevailed in recent years or than now seem likely to prevail in the staff forecast over the next few years.

Second, one benefit of forward-looking policy is that, if successful, it should produce a smoother path for output, other things equal. Total output summed over a period of years is probably not very sensitive to the particular path chosen to get to a given inflation objective, at least within reasonable bounds. However, wide variations in output--especially lengthy or deep corrections of prolonged overshoots in the economy--may be particularly disruptive and have their own costs.

To be sure, even if the economic forces at work are something like those identified in the staff forecast, with the economy producing only a little beyond its long-run potential waiting a little longer for confirmation

of the emergence of additional inflation should not add appreciably to the degree of variation in output or to output loss from higher inflation.

But the longer you delay to gather more evidence, the greater the adjustment that will be required in the economy, if inflation is in fact picking up. It was such sluggish policy responses--"too little too late"--that characterized policymaking before 1980, which tended to accentuate rather than smooth business cycles. Arguably, recent changes in financial markets have made it even more difficult to avoid falling into this pattern. The lack of a reliable nominal intermediate indicator, such as the money supply, to help signal needed changes in policy, along with the increasingly intense public scrutiny of each meeting of this Committee, can contribute to policy inertia.

A special difficulty at this time is that a firming would represent a change in the direction of policy. In recent meetings, several of you have remarked that this situation means that you need to see more evidence to support policy firming than if your last action also had been a tightening. One reason given for setting this higher standard is that markets tend to react more strongly to changes in policy direction than to continued

adjustments along a given path. If, in the Committee's view, only a small adjustment of financial conditions is needed to meet its objectives, a major market response would risk overshooting, causing the economy to become weaker than desirable. Such market reactions are based on their readings of Committee policy patterns. From experience, markets have come to expect long strings of policy actions in one direction. The danger is that a self-reinforcing mechanism is in place; Committee concerns about market overreaction delay the turn in policy and that delay itself implies the need for a greater tightening or easing, often in a series of actions. If the next move is a tightening, the previous string of easings--at 75 basis points--will have been the smallest string in either direction since 1982. From more such experiences, along with Federal Reserve explanations of its strategy and tactics, the market may come to recognize that mid-course policy corrections, when shocks or surprises are not large, can be modest and readily reversed.